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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,028	01/29/2002	Tokuju Oikawa	2870-0179P	2676

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EXAMINER

CHEA, THORL

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 05/05/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/058,028

Applicant()

OIKAWA, TOKUJU

Examin r

Thorl Chea

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-- The MAILING DATE of this communication appears on th cover sheet with th correspondence address --

Period f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on March 4, 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8, 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Ito et al (Ito) in view of JP11-194447 (JP'447), Eshelman et al (Eshelman), Lok et al ('112), and Lok et al ('270).

Ito a photothermographic material containing non-photosensitive silver halide, photosensitive silver halide, reducing agent for silver ions and binder and the compound of formula (1) to (3) claimed in the present claimed invention, and the amount thereof is within 1×10^{-6} mol to 1 mol/mol of silver halide. Note to the compound of formula (1) to (3) in column 18 and the amount thereof in column 33, lines 22-25. The photosensitive silver halide having grain size of 0.02 to 0.12 μm and chemically sensitize with gold compound. Note column 9, lines 45-55 and column 12, lines 16-29. See also the teaching of the process in column 90, lines 41-67 and columns 91-92.

The JP'136 discloses a heat-developable material containing non-photosensitive silver halide, photosensitive silver halide, reducing agent for silver ions and binder and the compound exemplified in the present application disclosure which meet the requirements (i) to (iii) claimed in the present invention, and the amount thereof is from 1×10^{-6} mol to 1 mole/mol of silver halide. See the compound in column 1 (or Its English

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equivalent) US Patent No. 6,177,240, in columns 7-24; and in column 26, lines 37-40). 29 and the English equivalence of JP'136, Yamada et al, in column 30, line 45. The photosensitive silver halide having grain size of 0.02 to 0.14 μm and chemically sensitize with gold compound. Note to the English Equivalence thereof in column 29, lines 42-55, and column 30, line 45. See also the process such as exposing the material with laser in column 44.

The teaching in Ito differs from the claimed invention in the use of the organic gold compound to chemically sensitize the silver halide emulsion, which has been however known in the art such as disclosed in JP11-194447 (JP'447), Eshelman, Lok et al ('112) or '270. It would have been obvious to use a known organic gold sensitizer to chemically sensitize the silver halide emulsion taught in Ito in combination with the compound taught in JP'136 to chemically sensitize the silver halide emulsion taught in Ito in combination with the compound taught in JP'136 to provide photothermographic material high in Dmax and sensitivity, enhance enough in contrast, small in photographic performance due to fluctuation of development conditions and superior in effect of restraining dependence on development condition.

3. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Ito et al (Ito) in view of JP11-194447 (JP'447), Eshelman et al (Eshelman), Lok et al ('112), and Lok et al ('270) as applied to claims 1-8, 10-12 above, and further in view of Hahm et al (Hahm).

~~Hahm discloses the sulfur compound of claim 9 in combination with gold compound to~~
chemically sensitize silver halide emulsion. See the abstract of the invention. It would

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have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the sulfur compound in combination with the gold sensitizer to chemically sensitize the silver halide taught in Ito to provide invention as claimed.

Response to Arguments

4. Applicant's arguments filed March 4, 2003 have been fully considered but they are not persuasive. It is the Examiner's position that the claimed invention is prima facie obvious such as shown in the rejection above. The compound (iv) has been known as nucleating agent, compounds (1) to (3) taught in Ito and the compound meet the requirement defined in (i) to (iii) taught in JP'136 to provide heat developable material high in Dmax and sensitivity, enhance enough in contrast, small in photographic performance due to fluctuation of development conditions and superior in effect of restraining dependence on development condition. It would have been prima facie obvious to use the compound in JP'136 in the material of Ito for same reason. The organic gold compound has been used as chemical sensitizer for silver halide emulsion, and the use thereof to chemically sensitize the silver halide emulsion taught in Ito would have been found obvious to the worker of ordinary skill in the art.

The argument with respect to the unexpected results presented in Declaration by Tokuju Oikagawa is not persuasive. First, the results are irrelevant to the closest prior art of record, namely Ito. None of the comparative samples were prepared accordingly to the material taught in Ito. The comparative sample is made accordingly to samples presented in the present invention, while the scope of the claimed encompasses all additives used in the material taught in Ito. The showing of single parameter such as

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nucleating agent is not sufficient to demonstrate the unexpected superiority of the claimed invention over the closest prior art of record. Second, the results are not commensurate with the scope of the claimed invention. The scope of the claimed invention is related to the combination of at least one compound satisfying condition (iv) which, compound of formula (1) to (3) and at least one of (i) to (iii), and an organic gold compound. The results shown in the Declaration contains only the use of the compound satisfying the condition (iv). Third, the results would have expected from Ito or the use of the compound taught in JP'136. Note for instance the results shown in Ito, Table 23 in column 97-98 which show low Dmin, high Dmax and sensitivity, and the compound of JP'136 provides photothermographic material high in Dmax and sensitivity, enhance enough in contrast, small in photographic performance due to fluctuation of development conditions and superior in effect of restraining dependence on development condition.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of


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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (703)308-3498. The examiner can normally be reached on M-F (9:30 - 6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet C Baxter can be reached on (703)308-2303. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9301 for regular communications and (703)872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

Tchea 
May 2, 2003


Thorl Chea
Primary Examiner
Art Unit 1752